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RESPONSES TO DOE COMMENTS ON PART B PERMIT APPLICATION  
FOR TRU MIXED WASTE, SECTIONS C AND I  
C. E. WICKLAND

**ADMIN RECORD**

A-SW-000330

87

RESPONSE TO DOE COMMENTS ON PART B PERMIT APPLICATION  
FOR TRU MIXED WASTE SECTIONS C AND I

**SPECIFIC COMMENT**  
**SECTION C**

1. Page C-3, second paragraph, second sentence

The basis for establishing the maximum concentration of hazardous constituents for each WFN should be given and referenced.

**Response**

The following paragraph is included on page C-2 in the July 1 submittal of the Part B Permit Application for TRU Mixed Waste.

"The product quality objectives and an overriding concern for safety results in a highly structured production activity. The ingredients entering a given process cannot be substituted and the process conditions are highly controlled. This allows the characterization of TRU mixed wastes through extensive process knowledge. Process knowledge is acquired through a detailed familiarity with the production processes and raw materials, some of which are classified, and the interrelationships between and impacts caused by preceding process operations. Also, potential variability in processes or their sequence is required to develop ranges of waste characteristic which must be considered because of the multiple products produced at Rocky Flats Plant. Process knowledge as used in this section was secured by Rockwell staff familiar with raw materials, production processes and waste activities. This process knowledge serves as the basis for this plan. Where possible, process knowledge is supported by, and augmented with analytical results."

2. Page C-3, second paragraph, first sentence

Table C-1 is introduced as listing WFNs for off-site disposal or long term storage. The footnote for WFN 116, TRU Combustible Waste, implies that this waste form is classified as a mixed waste with activity above the Economic Discard Level. Please rephrase this footnote to indicate that this WFN is a recoverable residue until its activity is below the EDL.

**Response**

The intent of listing IDC's 330, 336, 337 and 831, 832, 833 was to show the relationship of the first three codes to the second three

IDC's 330 336 and 337 are assigned as generated and are in reality potentially recoverable residues. Those drums which are subsequently determined to be below the EDL are re-labeled 831 832 or 833. Since this adds confusion, IDC 330, 336 and 337 and the footnote will be deleted from Table C-1 when the Part B Permit Application is revised.

3. Page C-9, second paragraph, second sentence

This paragraph should include a discussion of the reasons for selecting the specific waste streams for sampling.

Response:

Each aqueous waste stream from a plutonium processing building which is treated in Building 374 Liquid Waste Treatment Facility was sampled and analyzed. This was done to identify hazardous constituents in the TRU aqueous streams treated in Building 374. When the Part B Permit is revised a statement to this effect will be added.

4. Page C-25, third paragraph, second sentence

Please describe and reference SW-846

Response.

"Test Methods For Evaluating Solid Waste, Physical/Chemical Methods" EPA Publication SW-846 is referenced as the approved analytical method in 6CCR 1007-3 260.11 and 40CFR 260.11. This reference will be included when the Part B Permit Application is revised.

5 Page C-39, section C-3a(3), last sentence

Please provide a description and reference for the Compatibility Codes

Response.

The reference to the Compatibility Code Chart in both the Federal and State regulations is referenced on page C-37 of the July 1 submittal.

6. C-56, first paragraph

This section should describe a procedure for handling and storage of the waste in the event that it does not pass the fingerprint tests. The action to "Review Process Knowledge" given in Table C-8 provides no information on how the waste is subsequently treated.

Response:

Tables C-7, C-8, C-10, and C-14 were revised to indicate the "Action Required" for each fingerprint test in the July 1 submittal.

SPECIFIC COMMENT

SECTION I

1. Page I-1-9, second paragraph, second sentence

If the method for sampling airborne radioactive particles cannot supply a real time measurement, then what is the purpose of using this method? Results from a sampling procedure implemented after the period of steam cleaning can only indicate how much damage has been done and does nothing to limit worker exposure or atmospheric release. This paragraph should discuss the purpose for obtaining after-the-fact data and why a real time counting method is not being implemented.

Response:

The air sampler is not intended to provide a measure of worker exposure, but to measure airborne concentrations to determine the degree of respirator protection required.

This section will be revised when the Part B is modified as follows. "This method does not provide a real time measurement of radioactivity in the air but will be used for documentation of airborne concentration to determine the Protection Factor (PF) for the degree of respirator protection required."

2 Page I-1-15, third paragraph, second sentence

This sentence as written suggests that the rinsate will have all of the contaminants listed Tables 1 and 2. Replacement of "will have" with "could have" is probably more appropriate

Response:

This revision was incorporated in the July 1 submittal.

3. Page I-2-4, first paragraph

This paragraph should discuss the appropriateness of these two locations for establishing soil background. Considering the past airborne radionuclide releases, the background plot northeast of the site seems particularly vulnerable to contamination at the soil surface. The known spatial distribution of airborne releases, both routine and accidental, should be indicated in terms of proximity to these sampling plots.

Response:

This paragraph was revised in the July 1 submittal as follows:  
"These preliminary results on background soil will be supplemented with additional analyses. These additional analyses and background characterization work will be detailed in a plan to be submitted to the Colorado Department of Health and Environmental Protection Agency for review and approval in 1988. This plan will detail activities and analyses for background characterization. The anticipated minimum parameter list is given in Table 1. This background characterization plan will be attached to this Permit Application upon approval, implementation, and data analysis."

4 Page I-2-11, section I-2b(2) and Table 3

The procedure for determining the number of soil samples needs to clarify the following points:

1. Is the purpose of this procedure to establish the background (i.e., natural) variance or the variance of a potential contaminant? This question should be addressed by including discussion of lead as a potential contaminant in the West Spray field and its corresponding appropriateness for establishing background or contaminant variance.

2. The procedure described in Table 3 does not indicate the area over which the lead samples were taken. The number of required samples is based on the sample variance which is in turn partly a function of the sample area. For instance, five samples taken adjacent to one another would show a variance approaching that of the lab uncertainty and not incorporate natural spatial variability in the field. Therefore a discussion of the areal extent over which this derived sampling density is appropriate is necessary.

3 Is the lead data provided in Table 3 normally distributed? A cursory examination of the data was indecisive

Response:

Section 1-2b(2) "Sample Point Identification" was completely re-written for inclusion in the July 1 submittal and Table 3 was deleted.